

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A porphyrin compound containing a biotinyl group represented by Formula (I):

Por-A-Bi

wherein:

Por represents a porphyrin residue optionally forming a metal complex selected from a group consisting of heme a, heme b, heme c, variant heme c, heme d, heme d1, siroheme, and heme o;

Bi represents a an optionally substituted biotinyl group or a biotinyl group substituted with halogen, nitro, cyano or C₁₋₆ alkyl; and

A represents a C₁-C₃₀ hydrocarbyl group, or a C₁-C₃₀ heterohydrocarbyl group having 1-10 heteroatoms selected from a group consisting of oxygen, sulfur, and nitrogen.

2. (Cancelled)

3. (Previously Presented) The compound according to claim 1, wherein the Por is a heme b residue.

4. (Previously Presented) The compound according to claim 1, wherein the Por is a porphyrin residue selected from a group consisting of uroporphyrin-I, uroporphyrin-II, coproporphyrin-III, protoporphyrin-IX, and hematoporphyrin-IX.

5. (Previously Presented) The compound according to claim 1, wherein the Bi is a biotinyl group.

6. (Previously Presented) The compound according to claim 1, wherein the A is a straight chain or branched alkylene group of 1-20 carbon atoms, and one or more than one of the non-adjacent CH₂ groups of the alkylene group is optionally substituted

by - NH-, - NH- NH-, - NHCO-, - CONH-, - N(C₁₋₃ alkyl)-, - O-, - S-, - CO-, - O- CO, - S- CO-, - O-COO-, -CO-S-, -CO-O-, - CH(halogen)-, - CH(CN)-, - CH=CH, -NH-NH- CO- or - CO- NH- NH- .

7. (Previously Presented) The compound of claim 1, wherein the A is selected from a group consisting of

- NH- NH-,
- NH- NH- CO- (CH₂)_n- NH-,
- NH- NH- CO- (CH₂)_n- NH- CO- (CH₂)_n- NH-,
- NH- (CH₂)_n- NH-,
- NH- NH- CO- (CH₂)_n- NH-,
- NH- NH- CO- (CH₂)_n- CO- NH- NH-,
- NH- (CH₂)_n- CO- NH- NH-, and
- NH(CH₂)_n- CO- NH- (CH₂)_n- CO- NH- NH-

in these formulae each n independently represents 1-10.

8. (Original) A method for preparing the porphyrin compound containing a biotinyl group according to claim 1, comprising reacting a porphyrin optionally forming a metal complex with a compound containing a terminally aminated biotinyl group in the presence of a coupling agent.

9. - 10. (Cancelled)

11. (Original) A hemoprotein labeling compound that is the compound according to claim 1.

12. (Cancelled)

13. (Currently Amended) A diagnostic agent for hemoprotein-associated diseases, comprising the labeling compound according to claim 11 a porphyrin compound containing a biotinyl group represented by Formula (I):

Por-A-Bi

wherein:

Por represents a porphyrin residue forming a metal complex selected from a group consisting of heme a, heme b, heme c, variant heme c, heme d, heme d1, siroheme, and heme o;

Bi represents a biotinyl group or a biotinyl group substituted with halogen, nitro, cyano or C₁₋₆ alkyl; and

A represents a C₁-C₃₀ hydrocarbyl group, or a C₁-C₃₀ heterohydrocarbyl group having 1-10 heteroatoms selected from a group consisting of oxygen, sulfur, and nitrogen.

14. (Currently Amended) A therapeutic drug for photodynamic therapy, comprising ~~the compound according to claim 4~~ a porphyrin compound containing a biotinyl group represented by Formula (I):

Por-A-Bi

wherein:

Por represents a porphyrin residue selected from a group consisting of uroporphyrin-I, uroporphyrin-II, coproporphyrin-III, protoporphyrin-IX, and hematoporphyrin-IX;

Bi represents a biotinyl group or a biotinyl group substituted with halogen, nitro, cyano or C₁₋₆ alkyl; and

A represents a C₁-C₃₀ hydrocarbyl group, or a C₁-C₃₀ heterohydrocarbyl group having 1-10 heteroatoms selected from a group consisting of oxygen, sulfur, and nitrogen.